## **Abstract**

The invention relates to a sensor and guide wire assembly (21; 31; 41) for intravascular measurements of physiological variables in a living body, comprising a core wire (22; 32; 42) and sensor element (23; 33; 43). The sensor element (23; 33; 43) according to the invention comprises basically a mounting base (24; 34; 44) and a pressure sensitive end portion (25; 35; 45) whose upper side is provided with a pressure sensitive device, such as a membrane (26; 36; 46). The mounting base (24; 34; 44) extends downwards from the end opposite to the pressure sensitive end (25; 35; 45), such that, when the sensor element (23; 33; 43) is mounted on the core wire (22; 32; 42), a clearance (27; 37; 47) is formed below the pressure sensitive end (25; 35; 45).